



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

June 29, 2012

Paul Henson, State Supervisor
U.S. Fish and Wildlife Service
Oregon Fish and Wildlife Office
2600 SE 98th Ave., Suite 100
Portland, Oregon 97266

Re: U.S. Environmental Protection Agency (EPA) Comments for the Experimental Removal of Barred Owls to Benefit Threatened Northern Spotted Owls Draft Environmental Impact Statement (DEIS) (EPA Project Number: 09-071-FWS).

Dear Mr. Henson:

This review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the DEIS considers the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The DEIS analyzes a no-action alternative and seven action alternatives to experimentally determine if removing barred owls will benefit northern spotted owl populations and to inform decisions on whether to move forward with future management of barred owls. The action alternatives vary by the number and location of study areas, the type of experimental design, duration of study, and method of barred owl removal.

The DEIS does not identify a preferred alternative. In cases where no preferred alternative is identified, it is the EPA policy to assign a rating to each action alternative. In our review of the action alternatives in this DEIS we did not identify any environmental impacts that should be avoided in order to fully protect the environment. We are therefore assigning a rating of LO (Lack of Objections) to each of the action alternatives (an explanation of this rating is attached). We do, however, offer the following comments, observations, and recommendations for your consideration as you move forward with drafting the Final EIS.

On page 4, the DEIS states that in order to make future decisions about the use of removal in the management of barred owls, two types of information are needed: efficacy (will removal work?) and efficiency (feasibility and cost). To address efficacy, the removal experiment would measure how much the reduction in barred owl populations on a portion of the study area affects spotted owl site occupancy, survival, reproduction, and population trend. To address efficiency, the removal study would document costs and techniques.

The extent to which each study design would be able to provide this information is discussed sporadically throughout the document, but the document does not show a direct comparison of each alternative's ability to provide the desired information. One way to present this information might be to use a matrix that crosswalks the alternative study designs against the desired information (the following is only offered as one possible example):

	Alt 1	Alt 2	Alt 3	Alt 4a	Alt 4b	Alt 5	Alt 6a	Alt 6b	Alt 7
Site Occupancy									
Survival									
Recruitment									
Reproduction									
Population trend									
Cost									
Technique Feasibility/ Level of Effort									
Strength of Inference									

Even a qualitative scoring (red, yellow, green for example) of the alternatives on their ability to provide the desired information would help to put the alternatives into sharper relief for the purposes of selecting a preferred alternative.

Based on our own analysis of the information presented in the DEIS, we believe some of the alternatives meet these information needs better than others. In particular, we believe that the demography area studies offer advantages over the site occupancy studies:

- The demography approach would allow measurement of underlying vital rates (survival and recruitment).
- The demography approach is better able to detect differences between treatment and control.
- Because this study could be conducted on existing demography areas, we believe there is opportunity for economic efficiency. If the northern spotted owl effectiveness monitoring program under the Northwest Forest Plan can be used to help fund the monitoring associated with this experiment (or vice versa), we believe that option should be seriously considered.

We also support using a demography area with existing pretreatment data:

- Study areas with existing pretreatment data would have greater power to detect effects of barred owl removal.
- The DEIS states that information on the effectiveness of a removal program is urgently needed (DEIS p. xxii). Similarly, the Spotted Owl Recovery Strategy states that because the abundance of barred owls continues to increase, the effectiveness in addressing this threat depends on action as soon as possible" (USFWS 2011, p. III-62). Utilizing a demography area with existing pretreatment data would address this need for urgency by allowing experimental removal to proceed without delay. Further, this approach would produce results more rapidly than the other proposed approaches.

Taken together, this means that the EPA is most supportive of Alternative 1 or 2. The key difference between Alternatives 1 and 2 is the number of study areas included in the experiment (one and three respectively). In order to best represent the range of conditions experienced by spotted owl populations (thereby allowing for better inference across their range) we support the idea of multiple study areas (Alternative 2). However, given the level of controversy, we wonder whether an alternate approach might be to take a phased approach whereby the experiment initially gathers results from one study area. Should that experiment yield positive results, the experiment could be applied to the additional two study areas.

Finally, our review identified errors in section 2.2.3.8 "Summary of Action Alternatives". Specifically, the number of study areas identified for Alternatives 3, 4a, 4b, 5, and 6b in section 2.2.3.8 are different than elsewhere in the DEIS. We recommend that these numbers be reconciled in the FEIS.

Thank you for this opportunity to comment and if you have any questions or concerns please contact me at (206) 553-1601 or by electronic mail at reichgott.christine@epa.gov, or you may contact Teresa Kubo of my staff at, (503) 326-2859 or by electronic mail at kubo.teresa@epa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Christine B. Reichgott". The signature is fluid and cursive, with the first name "Christine" and last name "Reichgott" being the most prominent parts.

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosures:
EPA Rating System for Draft Environmental Impact Statements

**U.S. Environmental Protection Agency Rating System for
Draft Environmental Impact Statements
Definitions and Follow-Up Action***

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.